



OIIPE

RAW SEQUENCE LISTING

DATE: 02/06/2002

PATENT APPLICATION: US/10/053,758

TIME: 15:47:22

Input Set : N:\CrF3\RULE60\10053758.raw

Output Set: N:\CRF3\02062002\J053758.raw

SEQUENCE LISTING

3 (1) GENERAL INFORMATION:

5 (i) APPLICANT: Cech, Thomas R.

6 Lingner, Joachim

7 Nakamura, Toru

8 Chapman, Karen B.

9 Morin, Gregg B.

10 Harley, Calvin

11 Andrews, William H.

13 (ii) TITLE OF INVENTION: Novel Telomerase

15 (iii) NUMBER OF SEQUENCES: 225

17 (iv) CORRESPONDENCE ADDRESS:

18 (A) ADDRESSEE: Townsend and Townsend and Crew LLP

19 (B) STREET: Two Embarcadero Center, 8th Floor

20 (C) CITY: San Francisco

21 (D) STATE: California

22 (E) COUNTRY: United States of America

23 (F) ZIP: 94111

25 (v) COMPUTER READABLE FORM:

26 (A) MEDIUM TYPE: Floppy disk

27 (B) COMPUTER: IBM PC compatible

28 (C) OPERATING SYSTEM: PC-DOS/MS-DOS

29 (D) SOFTWARE: PatentIn Release #1.0, Version #1.30

31 (vi) CURRENT APPLICATION DATA:

C--> 32 (A) APPLICATION NUMBER: US/10/053,758

C--> 33 (B) FILING DATE: 18-Jan-2002

59 (C) CLASSIFICATION: 536

56 (vii) PRIOR APPLICATION DATA:

37 (A) APPLICATION NUMBER: US/08/854,050

38 (B) FILING DATE: 09-MAY-1997

42 (A) APPLICATION NUMBER: US 08/851,843

43 (B) FILING DATE: 06-MAY-1997

47 (A) APPLICATION NUMBER: US 08/846,017

48 (B) FILING DATE: 25-APR-1997

52 (A) APPLICATION NUMBER: US 08/844,419

53 (B) FILING DATE: 18-APR-1997

57 (A) APPLICATION NUMBER: US 08/724,643

58 (B) FILING DATE: 01-OCT-1996

61 (viii) ATTORNEY/AGENT INFORMATION:

62 (A) NAME: Apple, Randolph T.

63 (B) REGISTRATION NUMBER: 36,429

64 (C) REFERENCE/DOCKET NUMBER: 015389-002930US

66 (ix) TELECOMMUNICATION INFORMATION:

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/053,758

DATE: 02/06/2002

TIME: 15:47:22

Input Set : N:\Crif3\RULE60\10053758.raw

Output Set: N:\CRF3\02062002\J053758.raw

```

67      (A) TELEPHONE: (415) 576-0200
68      (B) TELEFAX: (415) 576-0300
70 (2) INFORMATION FOR SEQ ID NO: 1:
72      (i) SEQUENCE CHARACTERISTICS:
73          (A) LENGTH: 3279 base pairs
74          (B) TYPE: nucleic acid
75          (C) STRANDEDNESS: single
76          (D) TOPOLOGY: linear
78      (ii) MOLECULE TYPE: other nucleic acid
79          (A) DESCRIPTION: /desc = "DNA"
81      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
83 AAAACCCCAA AACCCCAAAA CCCCTTTTAG AGCCCTGCAG TTGGAAATAT AACCTCAGTA      60
85 TTAATAAGCT CAGATTTTAA ATATTAATTA CAAAACCTAA ATGGAGGTTG ATGTTGATAA      120
87 TCAAGCTGAT AATCATGGCA TTCCTCAGC TCTTAAGACT TGTGAAGAAA TTAAAGAAAGC      180
89 TAAAACGTTG TACTCTTGA TCCAGAAAGT TATTAGATGA AGAAATCAAT CTCAAAGTCA      240
91 TTATAAAGAT TTAGAAGATA TTAAATATTT TCGCGAGACA AATATTGTTG CTACTCCACG      300
93 AGACTATAAT GAAGAAGATT TTAAAGTTAT TGCAAGAAAA GAAGTATTTT CAACTGGACT      360
95 AATGATCGAA CTTATTGACA AATGCTTAGT TGAACCTCTT TCATCAAGCG ATGTTTCAGA      420
97 TAGACAAAAA CTTCAATGAT TTGGATTTC ACTTAAGGGA AATCAATTAG CAAAGACCCA      480
99 TTTATTAACA GCTCTTTCAA CTCAAAGCA GTATTTCTTT CAAGACGAAT GGAACCAAGT      540
101 TAGAGCAATG ATTGGAAATG AGCTCTTCCG ACATCTCTAC ACTAAATATT TAATATTCCA      600
103 GCGAACTTCT GAAGGAACTC TTGTTCAATT TTGCGGGAAT AACGTTTTTG ATCATTGAA      660
105 AGTCAACGAT AAGTTTGACA AAAAGCAAAA AGGTGGAGCA GCAGACATGA ATGAACCTCG      720
107 ATGTTGATCA ACCTGCAAAT ACAATGTCAA GAATGAGAAA GATCACTTTC TCAACAACAT      780
109 CAACGTGCCG AATTGGAATA ATATGAAATC AAGAACCAGA ATATTTTATT GCACTCATTT      840
111 TAATAGAAAT AACCAATTCT TCAAAAAGCA TGAGTTTGTG AGTAACAAAA ACAATATTTT      900
113 AGCGATGGAC AGAGCTCAGA CGATATTCAC GAATATATTC AGATTTAATA GAATTAGAAA      960
115 GAAGCTAAAA GATAAGGTTA TCGAAAAAAT TGCCTACATG CTTGAGAAAAG TCAAAGATTT      1020
117 TAACTTCAAC TACTATTTAA CAAAATCTTG TCCTCTTCCA GAAAATTGGC GGGAACGGAA      1080
119 ACAAAAAATC GAAAACTTGA TAAATAAAAC TAGAGAAGAA AAGTCGAAGT ACTATGAAGA      1140
121 GCTGTTTAGC TACAACAATG ATAATAAATG CGTCACACAA TTTATTAATG AATTTTCTA      1200
123 CAATATACTC CCCAAAGACT TTTTGACTGG AAGAAACCGT AAGAATTTTC AAAAGAAAGT      1260
125 TAAGAAATAT GTGGAACATA ACAAGCATGA ACTCATTCAC AAAAATTAT TGCTTGAGAA      1320
127 GATCAATACA AGAGAAATAT CATGGATGCA GGTTGAGACC TCTGCAAAGC ATTTTATTA      1380
129 TTTTGATCAC GAAAACATCT ACGTCTTATG GAAATTGCTC CGATGGATAT TCGAGGATCT      1440
131 CGTCGTCTCG CTGATTAGAT GATTTTCTA TGTCACCGAG CAACAGAAAA GTTACTCCAA      1500
133 AACCTATTAC TACAGAAAGA ATATTTGGA CGTCATTATG AAAATGTCAA TCGCAGACTT      1560
135 AAAGAAGGAA ACGCTTGCTG AGGTCCAAGA AAAAGAGGTT GAAGAATGGA AAAAGTCGCT      1620
137 TGGATTTGCA CCTGAAAAC TCAGACTAAT ACCGAAGAAA ACTACTTTCC GTCCAATTAT      1680
139 GACTTTCAAT AAGAAGATTG TAAATTCAGA CCGGAAGACT ACAAATTA CTACAAATAC      1740
141 GAAGTTATTG AACTCTCACT TAATGCTTAA GACATTGAAG AATAGAATGT TTAAAGATCC      1800
143 TTTTGATTTC GCTGTTTTTA ACTATGATGA TGTAATGAAA AAGTATGAGG AGTTTGTTG      1860
145 CAAATGGAAG CAAGTTGGAC AACCAAAACCT CTTCTTTGCA ACTATGGATA TCGAAAAGTG      1920
147 ATATGATAGT GTAAACAGAG AAAAATATC AACATTCTTA AAAACTACTA AATTACTTTT      1980
149 TTCAGATTTT TGGATTATGA CTGCACAAAT TCTAAAGAGA AAGAATAACA TAGTTATCGA      2040
151 TTCGAAAAAC TTTAGAAAGA AAGAAATGAA AGATTATTTT AGACAGAAAT TCCAGAAGAT      2100
153 TGCATTGAA GGAGGACAAT ATCCAACCTT ATTCAGTGTT CTTGAAAATG AACAAAATGA      2160
155 CTTAAATGCA AAGAAAACAT TAATTGTTGA AGCAAAGCAA AGAAATTATT TTAAGAAAGA      2220
157 TAACTTACTT CAACCAGTCA TTAATATTG CCAATATAAT TACATTAAT TTAATGGGAA      2280

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/053,758

DATE: 02/06/2002

TIME: 15:47:22

Input Set : N:\Crif3\RULE60\10053758.raw

Output Set: N:\CRF3\02062002\J053758.raw

```

159 GTTTTATAAA CAAACAAAAG GAATTCCTCA AGGTCTTTGA GTTTCATCAA TTTTGTGATC 2340
161 ATTTTATTAT GCAACATTAG AGGAAAGCTC CTTAGGATTG CTTAGAGATG AATCAATGAA 2400
163 CCCTGAAAAT CCAAATGTTA ATCTTCTAAT GAGACTTACA GATGACTATC TTTTGATTAC 2460
165 AACTCAAGAG AATAATGCAG TATTGTTTAT TGAGAAACTT ATAAACGTAA GTCGTGAAAA 2520
167 TGGATTTTAA TTCAATAIGA AGAAACTACA GACTAGTTTT CCATTAAAGTC CAAGCAAATT 2580
169 TGCAAAATAC GGAATGGATA GTGTTGAGGA GCAAAATATT GTTCAAGATT ACTGCGATTG 2640
171 GATTGGCATC TCAATTGATA TGAAAACCTCT TGCTTTAATG CCAAATATTA ACTTGAGAAT 2700
173 AGAAGGAATT CTGTGTACAC TCAATCTAAA CATGCAAACA AAGAAAGCAT CAATGTGGCT 2760
175 CAAGAAGAAA CTAAAGTCGT TTTTAATGAA TAACATTACC CATTATTTTA GAAAGACGAT 2820
177 TACAACCGAA GACTTTGCGA ATAAAACCTCT CAACAAGTTA TTTATATCAG GCGGTTACAA 2880
179 ATACATGCAA TGAGCCAAAG AATACAAGGA CCACTTTAAG AAGAAGTTAG CTATGAGCAG 2940
181 TATGATCGAC TTAGAGGTAT CTAAAATTAT ATACTCTGTA ACCAGAGCAT TCTTTAAATA 3000
183 CTTGTGTGTC AATATTAAGG ATACAATTTT TGGAGAGGAG CATTATCCAG ACTTTTTCCT 3060
185 TAGCACACTG AAGCACTTTA TTGAAATTTT CAGCACAAAA AAGTACATTT TCAACAGAGT 3120
187 TTGCATGATC CTCAGGCAA AAGAAGCAAA GCTAAAAAGT GACCAATGTC AATCTCTAAT 3180
189 TCAATATGAT GCATAGTCGA CTATTCTAAC TTATTTTGGA AAGTTAATTT TCAATTTTGT 3240
191 TCTTATATAC TGGGGTTTTG GGGTTTTGGG GTTTTGGGG 3279

```

193 (2) INFORMATION FOR SEQ ID NO: 2:

195 (i) SEQUENCE CHARACTERISTICS:

196 (A) LENGTH: 1031 amino acids

197 (B) TYPE: amino acid

198 (C) STRANDEDNESS: Not Relevant

W--> 199 (D) TOPOLOGY: Not Relevant

201 (ii) MOLECULE TYPE: protein

203 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:

```

205 Met Glu Val Asp Val Asp Asn Gln Ala Asp Asn His Gly Ile His Ser
206 1 5 10 15
208 Ala Leu Lys Thr Cys Glu Glu Ile Lys Glu Ala Lys Thr Leu Tyr Ser
209 20 25 30
211 Trp Ile Gln Lys Val Ile Arg Cys Arg Asn Gln Ser Gln Ser His Tyr
212 35 40 45
214 Lys Asp Leu Glu Asp Ile Lys Ile Phe Ala Gln Thr Asn Ile Val Ala
215 50 55 60
217 Thr Pro Arg Asp Tyr Asn Glu Glu Asp Phe Lys Val Ile Ala Arg Lys
218 65 70 75 80
220 Glu Val Phe Ser Thr Gly Leu Met Ile Glu Leu Ile Asp Lys Cys Leu
221 85 90 95
223 Val Glu Leu Leu Ser Ser Ser Asp Val Ser Asp Arg Gln Lys Leu Gln
224 100 105 110
226 Cys Phe Gly Phe Gln Leu Lys Gly Asn Gln Leu Ala Lys Thr His Leu
227 115 120 125
229 Leu Thr Ala Leu Ser Thr Gln Lys Gln Tyr Phe Phe Gln Asp Glu Trp
230 130 135 140
232 Asn Gln Val Arg Ala Met Ile Gly Asn Glu Leu Phe Arg His Leu Tyr
233 145 150 155 160
235 Thr Lys Tyr Leu Ile Phe Gln Arg Thr Ser Glu Gly Thr Leu Val Gln
236 165 170 175
238 Phe Cys Gly Asn Asn Val Phe Asp His Leu Lys Val Asn Asp Lys Phe
239 180 185 190

```

RAW SEQUENCE LISTING
 PATENT APPLICATION. US/10/053,758

DATE: 02/06/2002
 TIME: 15:47:22

Input Set : N:\Crf3\RULE60\10053758.raw
 Output Set: N:\CRF3\02062002\J053758.raw

241	Asp	Lys	Lys	Gln	Lys	Gly	Gly	Ala	Ala	Asp	Met	Asn	Glu	Pro	Arg	Cys
242			195					200					205			
244	Cys	Ser	Thr	Cys	Lys	Tyr	Asn	Val	Lys	Asn	Glu	Lys	Asp	His	Phe	Leu
245			210				215					220				
247	Asn	Asn	Ile	Asn	Val	Pro	Asn	Trp	Asn	Asn	Met	Lys	Ser	Arg	Thr	Arg
248						230					235					240
250	Ile	Phe	Tyr	Cys	Thr	His	Phe	Asn	Arg	Asn	Asn	Gln	Phe	Phe	Lys	Lys
251					245					250					255	
253	His	Glu	Phe	Val	Ser	Asn	Lys	Asn	Asn	Ile	Ser	Ala	Met	Asp	Arg	Ala
254				260					265					270		
256	Gln	Thr	Ile	Phe	Thr	Asn	Ile	Phe	Arg	Phe	Asn	Arg	Ile	Arg	Lys	Lys
257			275					280					285			
259	Leu	Lys	Asp	Lys	Val	Ile	Glu	Lys	Ile	Ala	Tyr	Met	Leu	Glu	Lys	Val
260			290				295					300				
262	Lys	Asp	Phe	Asn	Phe	Asn	Tyr	Tyr	Leu	Thr	Lys	Ser	Cys	Pro	Leu	Pro
263			305			310					315					320
265	Glu	Asn	Trp	Arg	Glu	Arg	Lys	Gln	Lys	Ile	Glu	Asn	Leu	Ile	Asn	Lys
266					325					330					335	
268	Thr	Arg	Glu	Glu	Lys	Ser	Lys	Tyr	Tyr	Glu	Glu	Leu	Phe	Ser	Tyr	Thr
269				340					345					350		
271	Thr	Asp	Asn	Lys	Cys	Val	Thr	Gln	Phe	Ile	Asn	Glu	Phe	Phe	Tyr	Asn
272			355					360					365			
274	Ile	Leu	Pro	Lys	Asp	Phe	Leu	Thr	Gly	Arg	Asn	Arg	Lys	Asn	Phe	Gln
275			370				375					380				
277	Lys	Lys	Val	Lys	Lys	Tyr	Val	Glu	Leu	Asn	Lys	His	Glu	Leu	Ile	His
278			385			390				395					400	
280	Lys	Asn	Leu	Leu	Leu	Glu	Lys	Ile	Asn	Thr	Arg	Glu	Ile	Ser	Trp	Met
281				405						410					415	
283	Gln	Val	Glu	Thr	Ser	Ala	Lys	His	Phe	Tyr	Tyr	Phe	Asp	His	Glu	Asn
284				420					425					430		
286	Ile	Tyr	Val	Leu	Trp	Lys	Leu	Leu	Arg	Trp	Ile	Phe	Glu	Asp	Leu	Val
287			435				440						445			
289	Val	Ser	Leu	Ile	Arg	Cys	Phe	Phe	Tyr	Val	Thr	Glu	Gln	Gln	Lys	Ser
290			450				455					460				
292	Tyr	Ser	Lys	Thr	Tyr	Tyr	Tyr	Arg	Lys	Asn	Ile	Trp	Asp	Val	Ile	Met
293			465			470					475				480	
295	Lys	Met	Ser	Ile	Ala	Asp	Leu	Lys	Lys	Glu	Thr	Leu	Ala	Glu	Val	Gln
296				485						490					495	
298	Glu	Lys	Glu	Val	Glu	Glu	Trp	Lys	Lys	Ser	Leu	Gly	Phe	Ala	Pro	Gly
299				500					505					510		
301	Lys	Leu	Arg	Leu	Ile	Pro	Lys	Lys	Thr	Thr	Phe	Arg	Pro	Ile	Met	Thr
302			515					520					525			
304	Phe	Asn	Lys	Lys	Ile	Val	Asn	Ser	Asp	Arg	Lys	Thr	Thr	Lys	Leu	Thr
305			530				535					540				
307	Thr	Asn	Thr	Lys	Leu	Leu	Asn	Ser	His	Leu	Met	Leu	Lys	Thr	Leu	Lys
308			545			550					555					560
310	Asn	Arg	Met	Phe	Lys	Asp	Pro	Phe	Gly	Phe	Ala	Val	Phe	Asn	Tyr	Asp
311				565						570				575		
313	Asp	Val	Met	Lys	Lys	Tyr	Glu	Glu	Phe	Val	Cys	Lys	Trp	Lys	Gln	Val

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/053,758

DATE: 02/06/2002

TIME: 15:47:22

Input Set : N:\Crf3\RULE60\10053758.raw

Output Set: N:\CRF3\02062002\J053758.raw

```

314          580          585          590
316 Gly Gln Pro Lys Leu Phe Phe Ala Thr Met Asp Ile Glu Lys Cys Tyr
317          595          600          605
319 Asp Ser Val Asn Arg Glu Lys Leu Ser Thr Phe Leu Lys Thr Thr Lys
320          610          615          620
322 Leu Leu Ser Ser Asp Phe Trp Ile Met Thr Ala Gln Ile Leu Lys Arg
323          625          630          635          640
325 Lys Asn Asn Ile Val Ile Asp Ser Lys Asn Phe Arg Lys Lys Glu Met
326          645          650          655
328 Lys Asp Tyr Phe Arg Gln Lys Phe Gln Lys Ile Ala Leu Glu Gly Gly
329          660          665          670
331 Gln Tyr Pro Thr Leu Phe Ser Val Leu Glu Asn Glu Gln Asn Asp Leu
332          675          680          685
334 Asn Ala Lys Lys Thr Leu Ile Val Glu Ala Lys Gln Arg Asn Tyr Phe
335          690          695          700
337 Lys Lys Asp Asn Leu Leu Gln Pro Val Ile Asn Ile Cys Gln Tyr Asn
338          705          710          715          720
340 Tyr Ile Asn Phe Asn Gly Lys Phe Tyr Lys Gln Thr Lys Gly Ile Pro
341          725          730          735
343 Gln Gly Leu Cys Val Ser Ser Ile Leu Ser Ser Phe Tyr Tyr Ala Thr
344          740          745          750
346 Leu Glu Glu Ser Ser Leu Gly Phe Leu Arg Asp Glu Ser Met Asn Pro
347          755          760          765
349 Glu Asn Pro Asn Val Asn Leu Leu Met Arg Leu Thr Asp Asp Tyr Leu
350          770          775          780
352 Leu Ile Thr Thr Gln Glu Asn Asn Ala Val Leu Phe Ile Glu Lys Leu
353          785          790          795          800
355 Ile Asn Val Ser Arg Glu Asn Gly Phe Lys Phe Asn Met Lys Lys Leu
356          805          810          815
358 Gln Thr Ser Phe Pro Leu Ser Pro Ser Lys Phe Ala Lys Tyr Gly Met
359          820          825          830
361 Asp Ser Val Glu Glu Gln Asn Ile Val Gln Asp Tyr Cys Asp Trp Ile
362          835          840          845
364 Gly Ile Ser Ile Asp Met Lys Thr Leu Ala Leu Met Pro Asn Ile Asn
365          850          855          860
367 Leu Arg Ile Glu Gly Ile Leu Cys Thr Leu Asn Leu Asn Met Gln Thr
368          865          870          875          880
370 Lys Lys Ala Ser Met Trp Leu Lys Lys Lys Leu Lys Ser Phe Leu Met
371          885          890          895
373 Asn Asn Ile Thr His Tyr Phe Arg Lys Thr Ile Thr Thr Glu Asp Phe
374          900          905          910
376 Ala Asn Lys Thr Leu Asn Lys Leu Phe Ile Ser Gly Gly Tyr Lys Tyr
377          915          920          925
379 Met Gln Cys Ala Lys Glu Tyr Lys Asp His Phe Lys Lys Asn Leu Ala
380          930          935          940
382 Met Ser Ser Met Ile Asp Leu Glu Val Ser Lys Ile Ile Tyr Ser Val
383          945          950          955          960
385 Thr Arg Ala Phe Phe Lys Tyr Leu Val Cys Asn Ile Lys Asp Thr Ile
386          965          970          975

```

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/053,758

DATE: 02/06/2002

TIME: 15:47:23

Input Set : N:\Crif3\RULE60\10053758.raw

Output Set: N:\CRF3\02062002\J053758.raw

L:32 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
L:33 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
L:199 M:246 W: Invalid value of Alpha Sequence Header Field, [TOPOLOGY:], SeqNo=2
L:479 M:246 W: Invalid value of Alpha Sequence Header Field, [TOPOLOGY:], SeqNo=4
L:596 M:246 W: Invalid value of Alpha Sequence Header Field, [TOPOLOGY:], SeqNo=5
L:715 M:246 W: Invalid value of Alpha Sequence Header Field, [TOPOLOGY:], SeqNo=6
L:832 M:246 W: Invalid value of Alpha Sequence Header Field, [TOPOLOGY:], SeqNo=7
L:979 M:246 W: Invalid value of Alpha Sequence Header Field, [TOPOLOGY:], SeqNo=8
L:1156 M:246 W: Invalid value of Alpha Sequence Header Field, [TOPOLOGY:], SeqNo=9
L:1185 M:246 W: Invalid value of Alpha Sequence Header Field, [TOPOLOGY:], SeqNo=10
L:1218 M:246 W: Invalid value of Alpha Sequence Header Field, [TOPOLOGY:], SeqNo=11
L:1248 M:246 W: Invalid value of Alpha Sequence Header Field, [TOPOLOGY:], SeqNo=12
L:1280 M:246 W: Invalid value of Alpha Sequence Header Field, [TOPOLOGY:], SeqNo=13
L:1307 M:246 W: Invalid value of Alpha Sequence Header Field, [TOPOLOGY:], SeqNo=14
L:1334 M:246 W: Invalid value of Alpha Sequence Header Field, [TOPOLOGY:], SeqNo=15
L:1361 M:246 W: Invalid value of Alpha Sequence Header Field, [TOPOLOGY:], SeqNo=16
L:1388 M:246 W: Invalid value of Alpha Sequence Header Field, [TOPOLOGY:], SeqNo=17
L:1415 M:246 W: Invalid value of Alpha Sequence Header Field, [TOPOLOGY:], SeqNo=18
L:1439 M:246 W: Invalid value of Alpha Sequence Header Field, [TOPOLOGY:], SeqNo=19
L:1463 M:246 W: Invalid value of Alpha Sequence Header Field, [TOPOLOGY:], SeqNo=20
L:1487 M:246 W: Invalid value of Alpha Sequence Header Field, [TOPOLOGY:], SeqNo=21
L:1511 M:246 W: Invalid value of Alpha Sequence Header Field, [TOPOLOGY:], SeqNo=22
L:1534 M:246 W: Invalid value of Alpha Sequence Header Field, [TOPOLOGY:], SeqNo=23
L:1555 M:246 W: Invalid value of Alpha Sequence Header Field, [TOPOLOGY:], SeqNo=24
L:1576 M:246 W: Invalid value of Alpha Sequence Header Field, [TOPOLOGY:], SeqNo=25
L:1597 M:246 W: Invalid value of Alpha Sequence Header Field, [TOPOLOGY:], SeqNo=26
L:1618 M:246 W: Invalid value of Alpha Sequence Header Field, [TOPOLOGY:], SeqNo=27
L:2336 M:246 W: Invalid value of Alpha Sequence Header Field, [TOPOLOGY:], SeqNo=54
L:2513 M:246 W: Invalid value of Alpha Sequence Header Field, [TOPOLOGY:], SeqNo=55
L:2723 M:246 W: Invalid value of Alpha Sequence Header Field, [TOPOLOGY:], SeqNo=58
L:2744 M:246 W: Invalid value of Alpha Sequence Header Field, [TOPOLOGY:], SeqNo=59
L:3287 M:361 W: Invalid Split Codon, Sequence data for SEQ ID#: 68
L:3415 M:361 W: Invalid Split Codon, Sequence data for SEQ ID#: 68
L:3511 M:361 W: Invalid Split Codon, Sequence data for SEQ ID#: 68
L:3777 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=70
L:3805 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:71
L:3816 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=72
L:3843 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73
L:3854 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=74
L:3882 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:75
L:3893 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=76
L:3926 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=78
L:4390 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=87
L:4405 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=88
L:4420 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=89
L:4436 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=90
L:4451 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=91
L:4467 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=92

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/053,758

DATE: 02/06/2002

TIME: 15:47:23

Input Set : N:\Crf3\RULE60\10053758.raw

Output Set: N:\CRF3\02062002\J053758.raw

L:4483 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=93
L:4499 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=94
L:4515 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=95
L:4531 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=96
L:4547 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=97
L:4563 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=98
L:4579 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=99
L:4722 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101
L:4820 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=102
L:4836 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=103
L:4851 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=104
L:6626 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:174
L:6629 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:174
L:6632 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:174
L:6635 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:174
L:6644 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:174
L:6647 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:174
L:6650 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:174
L:6653 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:174
L:6711 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:176
L:6730 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:177
L:6733 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:177
L:6929 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:185
L:7302 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:202
L:7305 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:202
L:7308 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:202
L:7320 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:202
L:7323 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:202
L:7329 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:202
L:7370 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:203
L:7373 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:203
L:7495 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:206
L:7748 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:215
L:7751 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:215
L:7768 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:216
L:7771 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:216
L:7796 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:217
L:7799 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:217
L:7802 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:217
L:7805 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:217
L:7832 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:217
L:7835 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:217
L:7838 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:217
L:7913 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:217